

SCIENCE

And Technology Program



Theme Area: Facilities and Infrastructure

Program Area: Remote Sensing GIS

Project No.: FI00.10

Project Title: Examining the Feasibility of Using Light Detection and Ranging (LIDAR) Technology for High Resolution Surface Representation Base Maps of River Valleys

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Abstract: Reclamation has used 7.5-min U.S. Geological Survey (USGS) quadrangle base maps for decades. Earth surface representation derived from 7.5-min USGS quadrangle contours and digital elevation models is not detailed enough for many mapping and modeling applications. Light detection and ranging (LIDAR) technology is showing promise for providing high resolution digital elevation data cost effectively. This research proposes to examine the feasibility of using one meter resolution LIDAR technology for profiling river valleys.